RULE 2301 EMISSION REDUCTION CREDIT BANKING (Adopted September 19, 1991; Amended March 11, 1992; Amended December 17, 1992; Amended January 19, 2012)

1.0 Purpose

The purposes of this rule are to:

1.1 For affected pollutants:

- 1.1.1 Provide an administrative mechanism for sources to store emission reduction credits for later use as offsets where allowed by District Rules and Regulations or State and Federal Rules and Regulations.
- 1.1.2 Provide an administrative mechanism for sources to transfer emission reduction credits to other sources for use as offsets as allowed by Rule 2201 (New and Modified Stationary Source Review Rule) or State and Federal Rules and Regulations.
- 1.1.3 Define eligibility standards, quantitative procedures and administrative practices to ensure that emission reduction credits (ERCs) are real, permanent, quantifiable, surplus, and enforceable.

1.2 For greenhouse gasses:

- 1.2.1 Provide an administrative mechanism for sources to bank voluntary greenhouse gas emission reductions for later use.
- 1.2.2 Provide an administrative mechanism for sources to transfer banked greenhouse gas emission reductions to others for any use.
- 1.2.3 Define eligibility standards, quantitative procedures and administrative practices to ensure that banked greenhouse gas emission reductions are real, permanent, quantifiable, surplus, and enforceable.

2.0 Applicability

The provisions of this rule apply to all transactions involving the storage, transfer, or use of emission reduction credits of affected pollutants and greenhouse gases.

3.0 Definitions

Unless otherwise defined, terms as used in this rule are defined in Rule 2201 (New and Modified Stationary Source Review Rule).

- 3.1 Actual Emission Reductions: as defined in Rule 2201 (New and Modified Stationary Source Review Rule). If the reductions are authorized by an Authority to Construct, the adjustments made to the actual emissions reductions as defined in Rule 2201 (New and Modified Stationary Source Review Rule), shall be based on the rules, plans, workshop notices at the time the application for such Authority to Construct was deemed complete.
- 3.2 Affected Pollutant: as defined in Rule 2201 (New and Modified Stationary Source Review Rule), except for the purposes of this rule greenhouse gases shall not be considered affected pollutants.
- 3.3 Bankable Emission Reductions: emission reductions of affected pollutants and their precursors for which ambient air quality standards exist, and greenhouse gases, which reductions meet the provisions of this rule. Such reductions may be deposited in the District's ERC Bank. Once banked and certified, the emission reductions become ERCs.
- 3.4 Banking: the District's system of quantifying, certifying, recording, and storing ERCs for future use or transfer. This system shall be called the District's Emission Reduction Credit Bank (herein referred to as the ERC Bank).
- 3.5 Banking Register: the document that records all ERC deposits, withdrawals, transfers, and transactions.
- 3.6 Baseline Period: the same period as defined in Rule 2201 (New and Modified Stationary Source Review Rule).
- 3.7 Carbon Dioxide Equivalent (CO2E): the mass of carbon dioxide (CO2) that would have the same global warming potential as a given mass of another greenhouse gas. Conversions between GHGs and CO2Es shall be made using the conversion factors in Table 1.

Table 1
Conversion factors between GHGs and CO2E

GHG metric ton	CO2E metric ton
CO ₂	1
CH ₄	21
N ₂ O	310
HFC-23 (hydrofluorocarbons)	11,700
HFC-32	650
HFC-125	2,800
HFC-134a	1,300
HFC-143a	3,800

HFC-152a	140
HFC-227ea	2,900
HFC-236fa	6,300
HFC-4310mee	1,300
CF ₄ (perfluorocarbons)	6,500
C ₂ F ₆	9,200
C_4F_{10}	7,000
C ₆ F ₁₄	7,400
SF ₆ (sulfur hexafluoride)	23,900

- 3.8 Emission Reduction Credits (ERCs): reductions of actual emissions of affected pollutants or greenhouse gas emissions from emission unit recognized by the District as available for use as tradeoffs, offsets, CEQA mitigation, or for other purposes, in accordance with the requirements of this rule. To be eligible for certification as ERCs, emissions reductions must be real, surplus, permanent, quantifiable and enforceable. All emission reductions meeting these requirements may be certified as ERCs.
- 3.9 ERC Certificate: a document certifying title to a defined quantity and type of ERCs issued by the District to the owner(s) identified on the Certificate.
- 3.10 Greenhouse gas (GHG): carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs), and sulfur hexafluoride (SF6).
- 3.11 Non-inventoried Emissions: those emissions of an air pollutant into the atmosphere from any source which has not been recorded on the District emission inventory.
- 3.12 Non-permitted Emissions: those emissions of an air pollutant into the atmosphere from non-permitted emission sources that are not required to have air pollution permits. Non-permitted emissions may include emissions from agricultural waste burning, mobile source emissions, exempt emissions units, and sources that were never subject to the requirements of Rule 2201 (New and Modified Stationary Source Review Rule).
- 3.13 Offset: the use of an ERC to mitigate emission increases of an affected pollutant from a new or modified source subject to the requirements of Rule 2201 (New and Modified Stationary Source Review Rule).
- 3.14 Shutdown: shall mean either the earlier of the permanent cessation of emissions from an emitting unit or the surrender of that unit's operating permit. If, prior to the surrender of the operating permit, the APCO determines that:

- 3.14.1 the unit has been removed or fallen into an inoperable and unmaintained condition such that startup would require an investment exceeding 50% of the current replacement cost; and
- 3.14.2 the owner cannot demonstrate to the satisfaction of the APCO that the owner intended to operate again, then the APCO may cancel the permit and deem the source shutdown as of the date of last emissions. Evidence of an intent to operate again may include valid production contracts, orders, other agreements, or any economically based reasons which would require the operation of the emitting unit after initial cessation of emissions.
- 3.15 Transfer: the conveyance of an ERC from one entity to another.
- 4.0 Eligibility of Emission Reductions
 - 4.1 Affected Pollutant Emissions Reductions Occurring Before September 19, 1991

For the purpose of this section District means the San Joaquin Unified Air Pollution Control District (SJVUAPCD) or any former county Air Pollution Control District that is now included in the SJVUAPCD.

Upon application and approval by the APCO, the following emissions reductions occurring prior to September 19, 1991 may receive Emissions Reduction Banking Certificates:

- 4.1.1 Emission reductions occurring after January 1, 1988 and prior to the date of adoption of this rule which have been recognized by the District pursuant to a banking rule or pursuant to a formal internal tracking mechanism shall be deemed eligible emission reductions, provided:
 - 4.1.1.1 the APCO determines that such emission reductions comply with the definition of AER:
 - 4.1.1.2 the reductions are real, surplus, permanent, quantifiable, and enforceable; and
 - 4.1.1.3 they have not been used for approval of an Authority to Construct or used as offsets.
- 4.1.2 Emissions reductions occurring prior to January 1, 1988 which have been recognized by the District pursuant to a banking rule or were formally recognized in writing by the District as available for offsets shall be eligible for emissions reductions banking certificates provided:

- 4.1.2.1 the APCO determines that such emissions reductions comply with the definition of AER, and such reductions are real, surplus, permanent, quantifiable, and enforceable;
- 4.1.2.2 the reductions have not been used for the approval of an Authority to Construct or used as offsets;
- 4.1.2.3 the reductions are included in or have been added to the 1987 emissions inventory, or will be accounted for in subsequent revisions to the 1991 AQAP and will be included in the Plan's annual tracking of emissions reductions.
- 4.1.2.4 a banking application is filed prior to June 17, 1993 in accordance with the requirements of Section 6.0, and the applicable requirements of Section 8.0 are met.
- 4.1.3 Except for reductions listed below, emission reductions for NOx, VOC, and CO (in non-attainment areas for CO) occurring prior to January 1, 1988 shall not be eligible for use as offsets, netting, or in any way mitigating an increase in emissions until the District, through rulemaking, has adopted an appropriate discounting or other mitigation measures to show progress towards air quality attainment. The restrictions shall not apply to the following reductions:
 - 4.1.3.1 reductions for which the District issued an Emissions Reduction Certificate according to a banking rule prior to December 17, 1992.
 - 4.1.3.2 Reductions for which the District has accepted a banking application in accordance with the provisions of this rule prior to December 17, 1992.
 - 4.1.3.3 Reductions authorized by the District for use as offsets, or as mitigation for new or modified emissions units prior to December 17, 1992.
- 4.1.4 Under no circumstances shall any emissions reductions occurring before September 19, 1991, other than as described in sections 4.1.1 or 4.1.2 be eligible for emissions reduction credit banking certificates.
- 4.2 Affected Pollutant Emissions Reductions Occurring After September 19, 1991 For emission reductions occurring after September 19, 1991, the following criteria must be met in order to deem such reductions eligible for banking:

- 4.2.1 The emission reductions are real, surplus, permanent, quantifiable, and enforceable;
- 4.2.2 AERs are calculated in accordance with the calculation procedures of Rule 2201 (New and Modified Stationary Source Review Rule) and comply with the definition of AERs of Rule 2201 (New and Modified Stationary Source Review Rule). Adjustment to emissions reductions for the Community Bank shall be made at the time the reductions are quantified pursuant to Rule 2201 (New and Modified Stationary Source Review Rule).
- 4.2.3 An application for ERC has been filed no later than 180 days after the emission reductions occurred.
- 4.2.4 For non-permitted emission units, emissions must have been included in the 1987 emissions inventory and the source creating ERCs shall apply for and acquire a Permit to Operate subject to enforceable permit conditions which ensures that the emission reductions will be provided in accordance with the provisions of this rule, and shall continue for the reasonably expected life of the proposed stationary source. If the district, pursuant to state laws, is prohibited to permit the emission unit, the stationary source creating ERCs shall execute a legal binding contract with the District which ensures that the emission reductions will be provided in accordance with the provisions of this rule, and shall continue for the reasonably expected life of the proposed source.
- 4.3 A stationary source which provided offsets for increase in permitted emissions pursuant to Rule 2201 (New and Modified Stationary Source Review Rule) and has been issued an Authority to Construct since January 1, 1988 may apply to bank such offsets pursuant to section 4.2 if the Authority to Construct is voluntarily surrendered, expires or is canceled or if the Permit to Operate resulting from such Authority to Construct is voluntarily modified, surrendered or is revoked.
- 4.4 The following affected pollutant emission reductions are not eligible as ERCs for banking:
 - 4.4.1 Emission reductions from the shutdown or curtailment of gasoline dispensing operations, or dry cleaning operations.
 - 4.4.2 Emission reductions occurring at a fossil fuel-fired power plant as the result of the operation of a cogeneration facility.
 - 4.4.3 Emission reductions occurring from the shutdown or curtailment of a stationary source for which the District originally provided the required offsets.

4.4.4 Emission reductions occurring from the shutdown or curtailment of a stationary source for which the offsets originally provided are no longer enforceable by the District such as reductions in open burning of agricultural waste used to offset emissions from a resource recovery project.

4.5 Greenhouse Gas Emission Reductions

The following criteria must be met in order to deem such reductions eligible for banking:

- 4.5.1 The greenhouse gas emission reduction must have actually occurred on or after January 1, 2005, except as allowed in specific CARB approved GHG emission reduction project protocols.
- 4.5.2 The greenhouse gas emission reductions must have occurred within the San Joaquin Valley Unified Air Pollution Control District.
- 4.5.3 The greenhouse gas emission reductions are real, surplus, permanent, quantifiable, and enforceable, except as provided in Section 4.5.5.
 - 4.5.3.1 Greenhouse gas emission reductions that occur at a facility subject to the CARB greenhouse gas cap and trade regulation on or after January 1, 2012 are not surplus.
 - 4.5.3.2 Greenhouse gas emission reductions that occur as a result of law, rule, or regulation that required the greenhouse gas emission reduction are not surplus.
 - 4.5.3.3 Greenhouse gas emission reductions that occur due to an action taken by an facility that is not the result of any greenhouse gas emission reduction requirement are surplus and additional of all greenhouse gas reduction requirements. Such emission reduction credit certificates shall be identified as specified in Section 6.15.2.
 - 4.5.3.4 Greenhouse gas emission reductions that occur due to an action taken by a facility that is not the result of any requirement, including any requirement that is not intended to control greenhouse gases, are surplus and additional of all requirements. Such emission reduction credit certificates shall be identified as specified in Section 6.15.3.
- 4.5.4 Greenhouse gas emission reductions are calculated as the difference between the historic annual average greenhouse gas emissions (as CO2E)

calculated using the consecutive 24 month period immediately prior to the date the emission reduction occurred, or another consecutive 24 month period in the 60 months prior to the date the emission reduction occurred if determined by the APCO as being more representative of normal operations, and the potential greenhouse gas emissions (as CO2E) after the project is complete, except as provided in section 4.5.5.

- 4.5.5 Greenhouse gas emission reductions proposed to be quantified using CARB approved emission reduction project protocols shall be calculated in accordance with the applicable protocol.
- 4.5.6 Emission reduction credits shall be made enforceable through permit conditions. If the district, pursuant to state laws, is prohibited from permitting the emission unit, the source creating the greenhouse gas emission reduction shall execute a legal binding contract with the District which ensures that the emission reductions will be generated in accordance with the provisions of this rule, and shall continue for the reasonably expected life of the proposed equipment, operation, or source.

5.0 ERC Certificate Application Procedures

- 5.1 Any entity which owns or operates a source at which an eligible emission reduction has occurred or will occur may apply for an ERC Certificate in accordance with the requirements of this rule.
- 5.2 The entity requesting the ERC Certificate shall make an application on forms supplied by the District.
- 5.3 An application shall be filed for each emission reduction. The application may be for reductions in one or more affected pollutant or greenhouse gas. The application shall contain sufficient information to allow for adequate evaluation of actual emission reductions from each emission unit.
- 5.4 In accordance with the provisions of Rule 1030 (Confidential Information) and Section 114(c) of the Federal Clean Air Act, applicants may claim confidentiality of information contained in the application.
- 5.5 Except for reductions covered under Sections 4.1.2 and 4.5.1, ERC Certificate applications for reductions shall be submitted within 180 days after the emission reduction occurs.
 - 5.5.1 For reductions covered under Section 4.1.2, ERC Certificate applications shall be filed with the District by June 17, 1993.

- 5.5.2 For reductions covered under Section 4.5.1 that occurred prior to January 19, 2012 ERC Certificate applications shall be filed with the District by July 19, 2012. For reductions covered under Section 4.5.1 that occur on or after January 19, 2012 ERC Certificate applications shall be submitted within 180 days after the emission reduction occurs.
- An entity that was previously issued an ERC for greenhouse gas emission reductions that was not quantified using a CARB approved emission reduction project protocol may subsequently submit an application to have the ERC reissued pursuant a CARB approved emission reduction project protocol at such time that an applicable emission reduction project protocol is approved by CARB. Such an application must meet the requirements, including timeliness, of the CARB approved emission reduction project protocol.
- 5.7 Where appropriate, to confirm emission reductions claimed in conjunction with an application for an ERC Certificate, the District may require source tests, continuous monitoring, production records, fuel use records, or any other appropriate means of measurement.
- 5.8 The form of the ERC Certificate shall be established by the APCO.
- 5.9 ERC applicants for emission reductions derived from a single reduction at a single emitting unit may apply for and receive single or multiple ERC Certificates.

 Multiple ERC Certificates shall be issued for each owner's proportional share.

6.0 Registration of ERC Certificates

- 6.1 The APCO may only grant an ERC Certificate after the emission reductions have actually occurred upon satisfaction of the following applicable provision(s):
 - 6.1.1 A revised Permit to Operate has been issued if the emission reductions were created as a result of greater operating efficiencies or from the application of more efficient control technology. This revised permit must include specific quantifiable emission limits reflecting the reduced emissions;
 - 6.1.2 If the emission reductions were created as a result of the shutdown of a permitted emissions unit, the relevant Permit(s) to Operate has been surrendered and voided.
 - 6.1.3 If the emission reductions from a permitted emissions unit were created by means of reducing production or production rates, the relevant Permit(s) to Operate have been modified to reflect the emission reductions.

- 6.1.4 If the emission reductions were created as a result of the application of greater operating efficiencies or from the application of a more efficient control technology to a then non-permitted source: Permit(s) to Operate has been obtained; or a written contract between the owner or operator of such source and the ERC applicant has been executed, which by its terms, shall be enforceable by the APCO. The referenced permit or contract shall include specific quantifiable emission limits reflecting reduced emissions. If the emissions reductions were created as a result of the modification of a non-permitted emissions unit, the stationary source shall be prohibited from operating a new emissions unit in the same source category without first obtaining Authority to Construct and Permit to Operate.
- When all the requirements of this rule have been satisfied and the emission reduction has actually occurred, the APCO shall issue the ERC Certificate. Upon the APCO's determination to grant an ERC Certificate, title to such ERC shall be registered in the Banking Register. Such titles may be computerized and made available for public inspection.
- 6.3 All information concerning titles, interests, and other matters such as liens, encumbrances, and changes of record shall be identified in the District's ERC Banking Register, as well as pertinent date(s) concerning such information, until such time as the ERC Certificate is used, canceled, or nullified by operation of law.
- 6.4 Each ERC Certificate shall be numbered, bear the date of issuance, be signed by the District official charged with the responsibility of keeping the District's ERC Bank, and bear the seal of the District. One (1) copy of the ERC Certificate shall be retained by the District, and the original shall be delivered to the owner or party acting for the owner. The record of issued ERC Certificates shall be retained by the District, and this record may be in computer storage. Delivery by the District of an ERC Certificate to an owner shall be accomplished in person or by registered mail. The person accepting the ERC Certificate must sign a receipt therefor and provide such proof of identity as the APCO shall require.
- 6.5 At the option of joint owners of ERCs, such persons may receive one (1) ERC Certificate for the entirety or separate ERC Certificates reflecting each proportional share, provided that such ERCs are derived from a single reduction at a single emitting unit. The District's ERC Bank shall reflect the consolidation or separation of the ERCs, and the previous Certificate(s) shall be canceled upon the issuance of the new Certificate(s).
- 6.6 After receiving written notice from an owner that they have released their right of control of valid existing banked emission reductions, or if an owner fails to file an application for banking emission reductions in accordance with procedures

- outlined in this rule, the APCO may place such emission reductions in the District's Community Bank without consent from the owner.
- 6.7 Adjustments to the quantity of banked ERCs shall be allowed without the owner's consent so long as the action to reduce the quantity of ERCs is consistent with applicable District, state, and federal rules and/or planning requirements, including Reasonable Further Progress. Actions to reduce the quantity of banked ERCs which are inconsistent with applicable District, state, or federal rules shall require the consent of the owner. Such adjustments shall only be made after public notice and hearing.
- 6.8 Prior to adjusting the estimated quantity or the conditions of deposit, use, or withdrawal of banked ERCs for any reason, the APCO shall notify the ERC Certificate owner in writing.
- 6.9 Except as provided in Section 6.7 of this rule, deposits are permanent until used by the depositor or any party to whom the ERC Certificate has been transferred. After issuance of the ERC Banking Certificate, subsequent changes in regulations to require the type of reduction which is banked shall not reduce or eliminate the deposit.
- 6.10 If the APCO determines that additional mandatory emission reductions will be necessary to achieve ambient air quality standards, the APCO may declare a full or partial moratorium on banked ERCs of the applicable contaminant. Prior to imposing any kind of moratorium, the APCO must provide public notice that the District has determined that sufficient emission reductions cannot be achieved through the imposition of controls on existing permitted or non-permitted emissions units. Should such a determination be made, a moratorium on deposits shall first be imposed. Should the APCO determine that a moratorium on withdrawals of banked ERCs is also necessary to attain applicable air quality standards, a public notice shall first be provided to this effect. Only after a public hearing resulting in the determination that a moratorium is needed and written notice to ERC Certificate owners of the applicable contaminant may any moratorium be imposed. Any such moratorium shall be lifted upon the determination by the APCO and public notice that Reasonable Further Progress can be demonstrated by the District.
- 6.11 Title to an ERC shall be deemed registered at the time the required information concerning the ERC is entered into the Register.
- 6.12 All dealings with ERCs or any interest therein, and all liens, encumbrances, and charges upon the same subsequent to the first registration thereof, shall be deemed to be subject to the terms of this regulation, and to such amendments and alterations as may hereafter be made.

- 6.13 The APCO may reissue lost or destroyed ERC Certificates after the owner vouches that the original has been lost or destroyed.
- 6.14 Greenhouse gas emission reductions shall be banked as metric tons of CO2E per year, rounded to the nearest metric ton.
- 6.15 Greenhouse gas emission reduction certificates shall include a notation that indicates how the emission reductions were quantified, as follows:
 - 6.15.1 Emission reductions quantified using a CARB approved protocol pursuant to Section 4.5.5 shall include a notation of the specific name and approval date of the protocol
 - 6.15.2 Emission reductions that are surplus of all greenhouse gas emission reduction requirements pursuant to Section 4.5.3.3 shall include the following notation "This emission reduction is surplus and additional to all applicable greenhouse emission reduction regulatory requirements."
 - 6.15.3 Emission reductions that are surplus of any regulatory requirement pursuant to Section 4.5.3.4 shall include the following notation "This emission reduction is surplus and additional to all applicable regulatory requirements."
- 7.0 Withdrawal, Transfer, and Use of ERCs
 - 7.1 ERCs may be used at the time of, or anytime after deposit into the District's ERC Bank by the owner of the ERC Certificate to provide contemporaneous offsets for increase in onsite emissions from new or modified emission units.
 - 7.2 An ERC Certificate may be transferred or used in whole or in part and in accordance with provisions of this rule. Transfer in whole or in part of a registered ERC Certificate shall be done in accordance with application procedures of this rule. Upon payment of an application fee, a new ERC Certificate certifying the title or interest in the ERC, shall be issued and the last previous original(s) shall be canceled. Such cancellation shall be recorded in the Banking Register.
 - 7.3 Nothing in this rule prevents the lease or temporary transfer, in whole or in part of, ERCs represented by ERC Certificates. However, all transfers shall be considered permanent until modified by application which demonstrates to the satisfaction of the APCO that the emissions for which the ERCs were required have either ceased or other emission reductions have been secured.
 - 7.4 All emissions reductions to be used as offsets which are not contemporaneous with emissions increases shall be transferred by application pursuant to this rule.

Reductions to be used as offsets which are contemporaneous and meet the requirements of Rule 2201 (New and Modified Stationary Source Review Rule) and the requirements of this rule may take place without application for ERC.

7.5 This rule does not define or mandate any uses of banked greenhouse gas emission reductions.

8.0 Administrative Requirements

- 8.1 The APCO shall determine whether an ERC Banking Certificate application is complete not later than 30 calendar days following receipt of the application, or after a longer time period agreed upon in writing by both the applicant and the APCO.
- 8.2 If the APCO determines that the application is not complete, the applicant shall be notified in writing of the decision, specifying the additional information that is required. The applicant shall have 90 days to submit the requested information. Upon receipt of all requested information, the District shall have 30 days to determine completeness. If no data is submitted or the application is still incomplete, the APCO may cancel the ERC Banking Certificate application with written notification to applicant. Upon determination that the application is complete, the APCO shall notify the applicant in writing. Thereafter, only information to clarify, correct, or otherwise supplement the information submitted in the application may be requested.
- 8.3 Withdrawal of a banking application by an applicant shall result in cancellation of the application; any resubmittal shall be evaluated using a baseline calculated as of the date of resubmittal.
- 8.4 Upon acceptance of a complete application, the APCO shall have 60 days to perform an initial assessment of the application. Upon completion of this initial assessment the District shall provide written notice of such to the applicant and shall also provide written notice of acceptance to ARB and EPA and publish notice in a newspaper of local and general circulation in the District. The notice shall specify the applicant and the quantity of emission reductions requested and a statement of the initial assessment.

Publication of the notice shall commence a 30 day public comment period during which the APCO shall accept written comments on the merits of the ERC Certificate application. Upon conclusion of this 30 day period, the APCO shall have 30 days to render a decision as to whether the APCO approves, conditionally approves, or denies the application. This decision shall be promptly supplied in writing to the applicant and published in a newspaper of local circulation.

The noticing requirements period shall be waived by the APCO if the emission reductions have already been subject to ARB, EPA and public comment. Noticing requirements shall not be waived for emissions reductions which were not formally banked and which occurred prior to January 1, 1988.

- 8.5 The applicant or any other party may appeal the APCO's decision following provisions specified in the applicable rules in Regulation V (Procedure Before the Hearing Board).
- 8.6 The District shall maintain a Banking Register, which shall consist of a record of all deposit applications, deposits, withdrawals, and transactions with regard to the District's ERC Bank.